

## breakout ABSTRACT

Abstract No. 34

### TITLE

#### CONSIDERING THE KNOWLEDGE BASE IN SELECTING TARGETS AND METHODS FOR ENVIRONMENTAL PUBLIC HEALTH TRACKING

### TRACK

#### Network Content

### OBJECTIVES

At the end of the presentation, the participants should be able to:

1. Explain the essential elements of a systematic approach to environmental public health;
2. Identify three ways in which data can be used in environmental public health;
3. Define "measures" and their role in environmental public health tracking;
4. Identify three ways in which the state of knowledge can influence the selection of targets for tracking

### SUMMARY

Environmental public health tracking provides for the collection, analysis, interpretation, and dissemination of information about environmental factors, human exposures, and health outcomes and the relationships between them. Data sources must be identified and developed for tracking, and methods for analyzing and presenting data must be agreed upon. One factor important to deciding what data sources to select and how to analyze, interpret, and present data is existing knowledge about relationships between environmental factors and health outcomes. Such knowledge varies considerably. For example, much is known about relationships between levels of lead in blood and health impacts. The relationships are well established, and dose-response relationships can be described. However, while patterns of occurrence suggest that autism may be caused at least in part by environmental factors, such relationships are only beginning to be investigated and are not yet established. Effects of lead exposure and autism are both appropriate targets for EPHT. However, approaches would differ vary because of differences in the state of knowledge. For lead, because relationships to health outcomes are well established, focusing on sources of exposure may be most productive because this may lead to results that most readily support actions to reduce exposure. For autism, by contrast, because relationships to environmental factors are not established, tracking of disease occurrence in ways that facilitate exploratory analyses and additional research may be most fruitful. This presentation will examine implications of differences in the state of knowledge for tracking of air pollution, respiratory effects, and neurodevelopmental outcomes.

### AUTHOR(S):

Amy D. Kyle., Ph.D., M.P.H.  
University of California Berkeley

John R. Balmes, University of California San Francisco

